Title (en)

ELECTRON MICROSCOPE AND IMAGE ACQUISITION METHOD

Title (de)

ELEKTRONENMIKROSKOP UND BILDAUFNAHMEVERFAHREN

Title (fr)

MICROSCOPE ÉLECTRONIQUE ET PROCÉDÉ D'ACQUISITION D'IMAGE

Publication

EP 3258477 A1 20171220 (EN)

Application

EP 17175742 A 20170613

Priority

JP 2016118163 A 20160614

Abstract (en)

There is provided an electron microscope capable of recording images in a shorter time. The electron microscope (100) includes: an illumination system (4) for illuminating a sample (S) with an electron beam; an imaging system (6) for focusing electrons transmitted through the sample (S); an electron deflector (24) for deflecting the electrons transmitted through the sample (S); an imager (28) having a photosensitive surface (29) for detecting the electrons transmitted through the sample (S), the imager (28) being operative to record focused images formed by the electrons transmitted through the sample (S); and a controller (30) for controlling the electron deflector (24) such that an active electron incident region (2) of the photosensitive surface (29) currently hit by the beam is varied in response to variations in illumination conditions of the illumination system (4).

IPC 8 full level

H01J 37/244 (2006.01); **H01J 37/28** (2006.01)

CPC (source: EP US)

H01J 37/045 (2013.01 - US); **H01J 37/09** (2013.01 - US); **H01J 37/1474** (2013.01 - US); **H01J 37/22** (2013.01 - US); **H01J 37/244** (2013.01 - EP US); **H01J 37/28** (2013.01 - EP US); H01J 2237/024 (2013.01 - US); H01J 2237/0435 (2013.01 - US); H01J 2237/0453 (2013.01 - EP US); H01J 2237/2443 (2013.01 - EP US); H01J 2237/2446 (2013.01 - EP US); H01J 2237/24475 (2013.01 - EP US); H01J 2237/2449 (2013.01 - EP US); H01J 2237/28 (2013.01 - US); H01J 2237/2802 (2013.01 - EP US); H01J 2237/2803 (2013.01 - US)

Citation (search report)

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- [XA] US 2003116717 A1 20030626 - KNIPPELMEYER RAINER [DE]
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- [A] US 2016118219 A1 20160428 - POTOCEK PAVEL [NL], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3258477 A1 20171220; **EP 3258477 B1 20190403**; JP 2017224449 A 20171221; JP 6702807 B2 20200603; US 10361061 B2 20190723; US 2018130634 A1 20180510

DOCDB simple family (application)

EP 17175742 A 20170613; JP 2016118163 A 20160614; US 201715620144 A 20170612